```
FILE 'USPAT' ENTERED AT 10:06:26 ON 06 MAR 97
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
  *              W E L C O M E   T O   T H E                      *
  *         U. S.   P A T E N T   T E X T   F I L E               *
  * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * * *
=> s carbon(2a)(flux or flow)

        374185 CARBON
         69049 FLUX
        721465 FLOW

L1        2097 CARBON(2A)(FLUX OR FLOW)
=> s l1(6a)(modif? or alter? or increas?)


       1106884 MODIF?
       1007221 ALTER?
       1183956 INCREAS?

L2          83 L1(6A)(MODIF? OR ALTER? OR INCREAS?)
=> s (phosphoenol pyruvate or pep)(4a)(suppl#### or availab?)
           118 PHOSPHOENOL
          3575 PYRUVATE
           110 PHOSPHOENOL PYRUVATE
                 (PHOSPHOENOL(W)PYRUVATE)
          1281 PEP

SEARCH ENDED BY USER
=> s (phosphoenol pyruvate or pep or phosphoenolpyruvate or phosho enol
pyruvate)(4a)(suppl#### or availab?)
           118 PHOSPHOENOL
          3575 PYRUVATE
           110 PHOSPHOENOL PYRUVATE
                 (PHOSPHOENOL(W)PYRUVATE)
          1281 PEP
           195 PHOSPHOENOLPYRUVATE
             6 PHOSHO
          4353 ENOL
          3575 PYRUVATE
             0 PHOSHO ENOL PYRUVATE
                 (PHOSHO(W)ENOL(W)PYRUVATE)
SEARCH ENDED BY USER
=> s (phosphoenol pyruvate or pep or phosphoenolpyruvate or phospho enol
pyruvate)(4a)(suppl#### or availab?)
           118 PHOSPHOENOL
          3575 PYRUVATE
```

```
            110 PHOSPHOENOL PYRUVATE
                  (PHOSPHOENOL(W)PYRUVATE)
           1281 PEP
            195 PHOSPHOENOLPYRUVATE
           2334 PHOSPHO
           4353 ENOL
           3575 PYRUVATE
             17 PHOSPHO ENOL PYRUVATE
                  (PHOSPHO(W)ENOL(W)PYRUVATE)

         777853 SUPPL####
         694450 AVAILAB?

L3           75 (PHOSPHOENOL PYRUVATE OR PEP OR PHOSPHOENOLPYRUVATE OR PHOS
PHO
                ENOL PYRUVATE)(4A)(SUPPL#### OR AVAILAB?)
=> s l2 and l3
L4            0 L2 AND L3
=> s phosphotransferase# or phospho transferase#
            666 PHOSPHOTRANSFERASE#
           2334 PHOSPHO
           3278 TRANSFERASE#
              8 PHOSPHO TRANSFERASE#
                  (PHOSPHO(W)TRANSFERASE#)
L5           673 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#
=> s (l2 or l3)(p)l5
L6            1 (L2 OR L3)(P)L5
=> d cit,ab,kwic

1.  5,602,030, Feb. 11, 1997, Recombinant glucose uptake system; Lonnie
O. Ingrahm, et al., 435/252.3, 69.1, 194, 252.33, 254.1, 254.11, 255.1,
255.2, 320.1 [IMAGE AVAILABLE]

US PAT NO:     5,602,030 [IMAGE AVAILABLE]            L6: 1 of 1

ABSTRACT:
Recombinant organisms are disclosed that contain a pathway for glucose
uptake other than the pathway normally utilized by the host cell. In
particular, the host cell is one in which glucose transport into the cell
normally is coupled to PEP production. This host cell is transformed so
that it uses an alternative pathway for glucose transport that is not
coupled to PEP production. In a preferred embodiment, the host cell is a
bacterium other than Z. mobilis that has been transformed to contain the
glf and glk genes of Z. mobilis. By uncoupling glucose transport into the
cell from PEP utilization, more PEP is produced for synthesis of products
of commercial importance from a given quantity of biomass supplied to the
host cells.
```

SUMMARY:

BSUM(4)

Phosphoenol . . . transport of glucose into the cell. Glucose is phosphorylated in a concerted process by a multiprotein, -membrane-bound complex termed the **phosphotransferase** system (PTS). In this process, PEP serves as the source of a high energy phosphate which is ultimately attached to. . . of the PEP produced is obligately consumed to provide energy for glucose uptake. This reduces by 50% the amount of **PEP** **available** as a source of carbon skeletons for biosynthesis, severely impacting the efficiency of conversion into many desired commercial products.

```
=> s (l2 or l3) and l5
L7            1 (L2 OR L3) AND L5
=> s (l2 or l3) and (aromatic or shikimate)
         159562 AROMATIC
             47 SHIKIMATE
L8           55 (L2 OR L3) AND (AROMATIC OR SHIKIMATE)
=> s (l2 or l3)(p)(aromatic or shikimate)
         159562 AROMATIC
             47 SHIKIMATE

L9            4 (L2 OR L3)(P)(AROMATIC OR SHIKIMATE)
=> d cit,ab,kwic
```

1. 5,602,030, Feb. 11, 1997, Recombinant glucose uptake system; Lonnie O. Ingrahm, et al., 435/252.3, 69.1, 194, 252.33, 254.1, 254.11, 255.1, 255.2, 320.1 [IMAGE AVAILABLE]

US PAT NO: 5,602,030 [IMAGE AVAILABLE] L9: 1 of 4

ABSTRACT:
Recombinant organisms are disclosed that contain a pathway for glucose uptake other than the pathway normally utilized by the host cell. In particular, the host cell is one in which glucose transport into the cell normally is coupled to PEP production. This host cell is transformed so that it uses an alternative pathway for glucose transport that is not coupled to PEP production. In a preferred embodiment, the host cell is a bacterium other than Z. mobilis that has been transformed to contain the glf and glk genes of Z. mobilis. By uncoupling glucose transport into the cell from PEP utilization, more PEP is produced for synthesis of products of commercial importance from a given quantity of biomass supplied to the host cells.

SUMMARY:

BSUM(4)

Phosphoenol . . . compounds of commercial importance. For example, an equimolar amount PEP is combined with erythrose-4-phosphate to provide the carbon skeleton for **aromatic** products such as tyrosine, phenylalanine, tryptophan, and some vitamins among other compounds. PEP also is combined with carbon dioxide to. . . of the PEP produced is obligately consumed to provide energy for glucose uptake. This reduces by 50% the amount of **PEP** **available** as a source of carbon skeletons for biosynthesis, severely impacting the efficiency of conversion into many desired commercial products.

=> d cit,ab l8 1-2

1. 5,602,030, Feb. 11, 1997, Recombinant glucose uptake system; Lonnie O. Ingrahm, et al., 435/252.3, 69.1, 194, 252.33, 254.1, 254.11, 255.1, 255.2, 320.1 [IMAGE AVAILABLE]

US PAT NO: 5,602,030 [IMAGE AVAILABLE] L8: 1 of 55

ABSTRACT:
Recombinant organisms are disclosed that contain a pathway for glucose uptake other than the pathway normally utilized by the host cell. In particular, the host cell is one in which glucose transport into the cell normally is coupled to PEP production. This host cell is transformed so that it uses an alternative pathway for glucose transport that is not coupled to PEP production. In a preferred embodiment, the host cell is a bacterium other than Z. mobilis that has been transformed to contain the glf and glk genes of Z. mobilis. By uncoupling glucose transport into the cell from PEP utilization, more PEP is produced for synthesis of products of commercial importance from a given quantity of biomass supplied to the host cells.

2. 5,556,517, Sep. 17, 1996, Solar process for making fullerenes; Richard E. Smalley, 204/157.47; 423/445B, DIG.19 [IMAGE AVAILABLE]

US PAT NO: 5,556,517 [IMAGE AVAILABLE] L8: 2 of 55

ABSTRACT:
This invention provides an improved process and apparatus for making fullerenes by vaporizing carbon and conducting the resulting carbon vapor to a dark zone for fullerene growth and annealing. In one embodiment concentrated solar energy is used to vaporize carbon. In a further embodiment, concentrated solar energy may be used to improve fullerene yields by vaporizing carbon and further to prevent carbon cluster formation until the carbon vapor passes into a dark zone for fullerene growth and annealing. The invention provides an improvement to increase

the yield of any known process wherein carbon is vaporized under high light conditions, the improvement comprising providing a dark zone for fullerene growth and annealing.

=> logoff y

U.S. Patent & Trademark Office LOGOFF AT 10:41:13 ON 06 MAR 97

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* * * * * * * * * * * * * * * * STN  Columbus  * * * * * * * * * * * * * * * *


*CEDB          - File is no longer available

  * The files listed above are temporarily unavailable.

FILE 'HOME' ENTERED AT 12:19:06 ON 06 MAR 97

=> fil .bec

COST IN U.S. DOLLARS                                    SINCE FILE      TOTAL
                                                           ENTRY    SESSION
FULL ESTIMATED COST                                         0.15       0.15

FILES 'MEDLINE, SCISEARCH, LIFESCI, BIOTECHDS, BIOSIS, EMBASE, HCAPLUS, NTIS,
       WPIDS' ENTERED AT 12:19:25 ON 06 MAR 97
ALL COPYRIGHTS AND RESTRICTIONS APPLY.  SEE HELP USAGETERMS FOR DETAILS.

9 FILES IN THE FILE LIST

=> s carbon(2a)(flux or flow)

FILE 'MEDLINE'
        142777 CARBON
         13953 FLUX
        200857 FLOW
L1         397 CARBON(2A)(FLUX OR FLOW)

FILE 'SCISEARCH'
        152532 CARBON
         55493 FLUX
        268213 FLOW
L2        1199 CARBON(2A)(FLUX OR FLOW)

FILE 'LIFESCI'
         26230 CARBON
          6170 FLUX
         25689 FLOW
L3          504 CARBON(2A)(FLUX OR FLOW)

FILE 'BIOTECHDS'
          6681 CARBON
           863 FLUX
          8601 FLOW
L4          131 CARBON(2A)(FLUX OR FLOW)
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FILE 'BIOSIS'
        170041 CARBON
         28079 FLUX
        219663 FLOW
L5        1988 CARBON(2A)(FLUX OR FLOW)

FILE 'EMBASE'
         79915 CARBON
         16189 FLUX
        207807 FLOW
L6         491 CARBON(2A)(FLUX OR FLOW)

FILE 'HCAPLUS'
        590965 CARBON
        136678 FLUX
        413601 FLOW
L7        2843 CARBON(2A)(FLUX OR FLOW)

FILE 'NTIS'
         62579 CARBON
         32590 FLUX
        146992 FLOW
L8         208 CARBON(2A)(FLUX OR FLOW)

FILE 'WPIDS'
        204337 CARBON
         51274 FLUX
        415399 FLOW
L9         737 CARBON(2A)(FLUX OR FLOW)

TOTAL FOR ALL FILES
L10       8498 CARBON(2A)(FLUX OR FLOW)

=> s l10(6a)(modif? or alter? or increas?)

FILE 'MEDLINE'

        192062 MODIF?
        352520 ALTER?
       1058722 INCREAS?
L11          49 L1 (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'SCISEARCH'

        206976 MODIF?
        267294 ALTER?
```

```
        740015 INCREAS?
L12         63 L2  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'LIFESCI'

         51490 MODIF?
         89602 ALTER?
        262275 INCREAS?
L13         37 L3  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'BIOTECHDS'
         15484 MODIF?
         10889 ALTER?
         35796 INCREAS?
L14         23 L4  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'BIOSIS'

        219266 MODIF?
        383692 ALTER?
       1250499 INCREAS?

L15        101 L5  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'EMBASE'

        183274 MODIF?
        349369 ALTER?
       1056754 INCREAS?
L16         48 L6  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'HCAPLUS'
        469458 MODIF?
        425226 ALTER?
       2125658 INCREAS?
L17         79 L7  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'NTIS'
         85875 MODIF?
         76946 ALTER?
        152960 INCREAS?
L18          8 L8  (6A)(MODIF? OR ALTER? OR INCREAS?)

FILE 'WPIDS'

        141137 MODIF?
        260656 ALTER?
```

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        759717 INCREAS?
L19          17 L9 (6A)(MODIF? OR ALTER? OR INCREAS?)

TOTAL FOR ALL FILES
L20         425 L10(6A)(MODIF? OR ALTER? OR INCREAS?)

=> s (phosphoenolpyruvate or (phospho enol or phosphoenol)(w)pyruvate or
pep)(4a)(suppl#### or availab?)

FILE 'MEDLINE'
           4806 PHOSPHOENOLPYRUVATE
           1982 PHOSPHO
            461 ENOL
             47 PHOSPHO ENOL
                  (PHOSPHO(W)ENOL)
            183 PHOSPHOENOL
          18255 PYRUVATE
           2045 PEP
         218890 SUPPL####
         150001 AVAILAB?
L21          16 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
                RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'SCISEARCH'
           3693 PHOSPHOENOLPYRUVATE
           1236 PHOSPHO
           4129 ENOL
             38 PHOSPHO ENOL
                  (PHOSPHO(W)ENOL)
            150 PHOSPHOENOL
          11650 PYRUVATE
           1379 PEP
          51734 SUPPL####
         131920 AVAILAB?
L22          19 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
                RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'LIFESCI'
           1429 PHOSPHOENOLPYRUVATE
            662 "PHOSPHO"
            171 "ENOL"
             13 PHOSPHO ENOL
                  ("PHOSPHO"(W)"ENOL")
             90 PHOSPHOENOL
           3941 PYRUVATE
            538 PEP
          12876 SUPPL####
```

```
        45369 AVAILAB?
L23         7 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
              RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'BIOTECHDS'
          234 PHOSPHOENOLPYRUVATE
          126 PHOSPHO
          104 ENOL
            2 PHOSPHO ENOL
                (PHOSPHO(W)ENOL)
           30 PHOSPHOENOL
         1121 PYRUVATE
          112 PEP
         4721 SUPPL####
         4895 AVAILAB?
L24         5 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
              RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'BIOSIS'
         5803 PHOSPHOENOLPYRUVATE
        54584 PHOSPHO
         1611 ENOL
          137 PHOSPHO ENOL
                (PHOSPHO(W)ENOL)
         3552 PHOSPHOENOL
        28426 PYRUVATE
         2775 PEP
        67835 SUPPL####
       156870 AVAILAB?
L25        32 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
              RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'EMBASE'
         3185 PHOSPHOENOLPYRUVATE
         1363 "PHOSPHO"
          982 "ENOL"
           37 PHOSPHO ENOL
                ("PHOSPHO"(W)"ENOL")
          137 PHOSPHOENOL
        14873 PYRUVATE
         1865 PEP
       312126 SUPPL####
       154976 AVAILAB?
L26        15 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
              RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'HCAPLUS'
```

```
          8227 PHOSPHOENOLPYRUVATE
          5037 PHOSPHO
         12082 ENOL
            30 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
           430 PHOSPHOENOL
         32524 PYRUVATE
          3846 PEP
        113608 SUPPL####
        208940 AVAILAB?
L27          45 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
               RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'NTIS'
             35 PHOSPHOENOLPYRUVATE
             37 PHOSPHO
             72 ENOL
              0 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
              5 PHOSPHOENOL
            287 PYRUVATE
           1067 PEP
          75242 SUPPL####
         196174 AVAILAB?
L28          13 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
               RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

FILE 'WPIDS'
             56 PHOSPHOENOLPYRUVATE
           2830 PHOSPHO
           1261 ENOL
             65 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
             67 PHOSPHOENOL
            819 PYRUVATE
            182 PEP
         560814 SUPPL####
          58010 AVAILAB?
L29           1 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W)PY
               RUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

TOTAL FOR ALL FILES
L30         153 (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOENOL)(W) P
               YRUVATE OR PEP)(4A)(SUPPL#### OR AVAILAB?)

=> s phosphotransferase# or phospho transferase#
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```
FILE 'MEDLINE'
         14543 PHOSPHOTRANSFERASE#
          1982 PHOSPHO
         25483 TRANSFERASE#
            10 PHOSPHO TRANSFERASE#
                 (PHOSPHO(W)TRANSFERASE#)
L31      14548 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'SCISEARCH'
          2867 PHOSPHOTRANSFERASE#
          1236 PHOSPHO
         18322 TRANSFERASE#
             9 PHOSPHO TRANSFERASE#
                 (PHOSPHO(W)TRANSFERASE#)
L32       2874 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'LIFESCI'
          1880 PHOSPHOTRANSFERASE#
           662 "PHOSPHO"
          6728 TRANSFERASE#
             6 PHOSPHO TRANSFERASE#
                 ("PHOSPHO"(W)TRANSFERASE#)
L33       1883 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'BIOTECHDS'
          1407 PHOSPHOTRANSFERASE#
           126 PHOSPHO
          1125 TRANSFERASE#
             0 PHOSPHO TRANSFERASE#
                 (PHOSPHO(W)TRANSFERASE#)
L34       1407 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'BIOSIS'
          4463 PHOSPHOTRANSFERASE#
         54584 PHOSPHO
         50000 TRANSFERASE#
          1748 PHOSPHO TRANSFERASE#
                 (PHOSPHO(W)TRANSFERASE#)
L35       5572 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'EMBASE'
          4721 PHOSPHOTRANSFERASE#
          1363 "PHOSPHO"
         21531 TRANSFERASE#
             4 PHOSPHO TRANSFERASE#
                 ("PHOSPHO"(W)TRANSFERASE#)
L36       4725 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#
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```
FILE 'HCAPLUS'
          5297 PHOSPHOTRANSFERASE#
          5037 PHOSPHO
         24394 TRANSFERASE#
             4 PHOSPHO TRANSFERASE#
               (PHOSPHO(W)TRANSFERASE#)
L37       5301 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'NTIS'
           121 PHOSPHOTRANSFERASE#
            37 PHOSPHO
           548 TRANSFERASE#
             0 PHOSPHO TRANSFERASE#
               (PHOSPHO(W)TRANSFERASE#)
L38         121 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

FILE 'WPIDS'
            85 PHOSPHOTRANSFERASE#
          2830 PHOSPHO
          1777 TRANSFERASE#
            11 PHOSPHO TRANSFERASE#
               (PHOSPHO(W)TRANSFERASE#)
L39          87 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

TOTAL FOR ALL FILES
L40       36518 PHOSPHOTRANSFERASE# OR PHOSPHO TRANSFERASE#

=> s l40 and l10

FILE 'MEDLINE'
L41           9 L31 AND L1

FILE 'SCISEARCH'
L42          11 L32 AND L2

FILE 'LIFESCI'
L43           3 L33 AND L3

FILE 'BIOTECHDS'
L44           3 L34 AND L4

FILE 'BIOSIS'
L45           8 L35 AND L5

FILE 'EMBASE'
L46           5 L36 AND L6
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```
FILE 'HCAPLUS'
L47             6 L37 AND L7

FILE 'NTIS'
L48             1 L38 AND L8

FILE 'WPIDS'
L49             1 L39 AND L9

TOTAL FOR ALL FILES
L50            47 L40 AND L10

=> s l40(8a)(delet? or inactivat?)

FILE 'MEDLINE'
         59349 DELET?
         59748 INACTIVAT?
L51         94 L31(8A)(DELET? OR INACTIVAT?)

FILE 'SCISEARCH'
         42508 DELET?
         39181 INACTIVAT?
L52         37 L32(8A)(DELET? OR INACTIVAT?)

FILE 'LIFESCI'
         26496 DELET?
         21480 INACTIVAT?
L53         51 L33(8A)(DELET? OR INACTIVAT?)

FILE 'BIOTECHDS'
          5470 DELET?
          4595 INACTIVAT?
L54         38 L34(8A)(DELET? OR INACTIVAT?)

FILE 'BIOSIS'
         59158 DELET?
         68865 INACTIVAT?
L55         95 L35(8A)(DELET? OR INACTIVAT?)

FILE 'EMBASE'
         50023 DELET?
         52972 INACTIVAT?
L56         63 L36(8A)(DELET? OR INACTIVAT?)

FILE 'HCAPLUS'
         54612 DELET?
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```
         78998 INACTIVAT?
L57        120 L37(8A)(DELET? OR INACTIVAT?)

FILE 'NTIS'
          3738 DELET?
          1794 INACTIVAT?
L58          0 L38(8A)(DELET? OR INACTIVAT?)

FILE 'WPIDS'
          7598 DELET?
          6426 INACTIVAT?
L59          3 L39(8A)(DELET? OR INACTIVAT?)

TOTAL FOR ALL FILES
L60        501 L40(8A)(DELET? OR INACTIVAT?)

=> s l60 and transport?

FILE 'MEDLINE'
        160802 TRANSPORT?
L61          9 L51 AND TRANSPORT?

FILE 'SCISEARCH'
        195868 TRANSPORT?
L62          1 L52 AND TRANSPORT?

FILE 'LIFESCI'
         43010 TRANSPORT?
L63          2 L53 AND TRANSPORT?

FILE 'BIOTECHDS'
          2646 TRANSPORT?
L64          1 L54 AND TRANSPORT?

FILE 'BIOSIS'
        181887 TRANSPORT?
L65         10 L55 AND TRANSPORT?

FILE 'EMBASE'
        148929 TRANSPORT?
L66          9 L56 AND TRANSPORT?

FILE 'HCAPLUS'
        394572 TRANSPORT?
L67         16 L57 AND TRANSPORT?

FILE 'NTIS'
```

```
        114593 TRANSPORT?
L68          0 L58 AND TRANSPORT?

FILE 'WPIDS'
        171127 TRANSPORT?
L69          0 L59 AND TRANSPORT?

TOTAL FOR ALL FILES
L70         48 L60 AND TRANSPORT?

=> s l40 and glucose

FILE 'MEDLINE'
        176697 GLUCOSE
L71       1739 L31 AND GLUCOSE

FILE 'SCISEARCH'
         94684 GLUCOSE
L72        477 L32 AND GLUCOSE

FILE 'LIFESCI'
         27021 GLUCOSE
L73        321 L33 AND GLUCOSE

FILE 'BIOTECHDS'
         21329 GLUCOSE
L74         67 L34 AND GLUCOSE

FILE 'BIOSIS'
        186218 GLUCOSE
L75        938 L35 AND GLUCOSE

FILE 'EMBASE'
        140796 GLUCOSE
L76        667 L36 AND GLUCOSE

FILE 'HCAPLUS'
        210996 GLUCOSE
L77       1018 L37 AND GLUCOSE

FILE 'NTIS'
          2689 GLUCOSE
L78          8 L38 AND GLUCOSE

FILE 'WPIDS'
         17490 GLUCOSE
L79          9 L39 AND GLUCOSE
```

```
TOTAL FOR ALL FILES
L80        5244 L40 AND GLUCOSE

=> s l60 and l80

FILE 'MEDLINE'
L81          15 L51 AND L71

FILE 'SCISEARCH'
L82           3 L52 AND L72

FILE 'LIFESCI'
L83           4 L53 AND L73

FILE 'BIOTECHDS'
L84           4 L54 AND L74

FILE 'BIOSIS'
L85          14 L55 AND L75

FILE 'EMBASE'
L86          13 L56 AND L76

FILE 'HCAPLUS'
L87          16 L57 AND L77

FILE 'NTIS'
L88           0 L58 AND L78

FILE 'WPIDS'
L89           1 L59 AND L79

TOTAL FOR ALL FILES
L90          70 L60 AND L80

=> s l80 and transport

FILE 'MEDLINE'
        138627 TRANSPORT
L91        495 L71 AND TRANSPORT

FILE 'SCISEARCH'
        176564 TRANSPORT
L92        208 L72 AND TRANSPORT

FILE 'LIFESCI'
```

```
         36010 TRANSPORT
L93        128 L73 AND TRANSPORT

FILE 'BIOTECHDS'
          2105 TRANSPORT
L94         11 L74 AND TRANSPORT

FILE 'BIOSIS'
        162087 TRANSPORT
L95        308 L75 AND TRANSPORT

FILE 'EMBASE'
        136056 TRANSPORT
L96        290 L76 AND TRANSPORT

FILE 'HCAPLUS'
        358331 TRANSPORT
L97        417 L77 AND TRANSPORT

FILE 'NTIS'
         68131 TRANSPORT
L98          3 L78 AND TRANSPORT

FILE 'WPIDS'
        114273 TRANSPORT
L99          1 L79 AND TRANSPORT

TOTAL FOR ALL FILES
L100      1861 L80 AND TRANSPORT

=> s l100 and (phosphoenolpyruvate or (phospho enol or phosphoenol)(w)pyruvate
or pep)

FILE 'MEDLINE'
          4806 PHOSPHOENOLPYRUVATE
          1982 PHOSPHO
           461 ENOL
            47 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
           183 PHOSPHOENOL
         18255 PYRUVATE
           200 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          2045 PEP
L101       259 L91 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'SCISEARCH'
```

```
          3693 PHOSPHOENOLPYRUVATE
          1236 PHOSPHO
          4129 ENOL
            38 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
           150 PHOSPHOENOL
         11650 PYRUVATE
           173 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          1379 PEP
L102       139 L92 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'LIFESCI'
          1429 PHOSPHOENOLPYRUVATE
           662 "PHOSPHO"
           171 "ENOL"
            13 PHOSPHO ENOL
                 ("PHOSPHO"(W)"ENOL")
            90 PHOSPHOENOL
          3941 PYRUVATE
            94 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
           538 PEP
L103        93 L93 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'BIOTECHDS'
           234 PHOSPHOENOLPYRUVATE
           126 PHOSPHO
           104 ENOL
             2 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
            30 PHOSPHOENOL
          1121 PYRUVATE
            30 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
           112 PEP
L104         6 L94 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'BIOSIS'
          5803 PHOSPHOENOLPYRUVATE
         54584 PHOSPHO
          1611 ENOL
           137 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
          3552 PHOSPHOENOL
         28426 PYRUVATE
          3629 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
```

```
          2775 PEP
L105       205 L95 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'EMBASE'
          3185 PHOSPHOENOLPYRUVATE
          1363 "PHOSPHO"
           982 "ENOL"
            37 PHOSPHO ENOL
                 ("PHOSPHO"(W)"ENOL")
           137 PHOSPHOENOL
         14873 PYRUVATE
           159 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          1865 PEP
L106       188 L96 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'HCAPLUS'
          8227 PHOSPHOENOLPYRUVATE
          5037 PHOSPHO
         12082 ENOL
            30 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
           430 PHOSPHOENOL
         32524 PYRUVATE
           402 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          3846 PEP
L107       308 L97 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'NTIS'
            35 PHOSPHOENOLPYRUVATE
            37 PHOSPHO
            72 ENOL
             0 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
             5 PHOSPHOENOL
           287 PYRUVATE
             3 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          1067 PEP
L108          3 L98 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'WPIDS'
            56 PHOSPHOENOLPYRUVATE
          2830 PHOSPHO
          1261 ENOL
```

```
             65 PHOSPHO ENOL
                (PHOSPHO(W)ENOL)
             67 PHOSPHOENOL
            819 PYRUVATE
             72 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
            182 PEP
L109          1 L99 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
                OL)(W)PYRUVATE OR PEP)

TOTAL FOR ALL FILES
L110       1202 L100 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOE
                NOL)(W) PYRUVATE OR PEP)

=> s l110 and mut/q

FILE 'MEDLINE'
L111        159 L101 AND MUT/Q

FILE 'SCISEARCH'
L112         81 L102 AND MUT/Q

FILE 'LIFESCI'
L113         46 L103 AND MUT/Q

FILE 'BIOTECHDS'
L114          4 L104 AND MUT/Q

FILE 'BIOSIS'
L115        114 L105 AND MUT/Q

FILE 'EMBASE'
L116        100 L106 AND MUT/Q

FILE 'HCAPLUS'
L117        157 L107 AND MUT/Q

FILE 'NTIS'
L118          2 L108 AND MUT/Q

FILE 'WPIDS'
L119          1 L109 AND MUT/Q

TOTAL FOR ALL FILES
L120        664 L110 AND MUT/Q

=> s l110 and l120
```

```
FILE 'MEDLINE'
L121        159 L101 AND L111

FILE 'SCISEARCH'
L122         81 L102 AND L112

FILE 'LIFESCI'
L123         46 L103 AND L113

FILE 'BIOTECHDS'
L124          4 L104 AND L114

FILE 'BIOSIS'
L125        114 L105 AND L115

FILE 'EMBASE'
L126        100 L106 AND L116

FILE 'HCAPLUS'
L127        157 L107 AND L117

FILE 'NTIS'
L128          2 L108 AND L118

FILE 'WPIDS'
L129          1 L109 AND L119

TOTAL FOR ALL FILES
L130        664 L110 AND L120

=> s l120 and (aromatic or shikimate)

FILE 'MEDLINE'
         15712 AROMATIC
           232 SHIKIMATE
L131         1 L111 AND (AROMATIC OR SHIKIMATE)

FILE 'SCISEARCH'
         48523 AROMATIC
           470 SHIKIMATE
L132         2 L112 AND (AROMATIC OR SHIKIMATE)

FILE 'LIFESCI'
          7727 AROMATIC
           177 SHIKIMATE
L133         2 L113 AND (AROMATIC OR SHIKIMATE)
```

```
FILE 'BIOTECHDS'
          3307 AROMATIC
            75 SHIKIMATE
L134         1 L114 AND (AROMATIC OR SHIKIMATE)

FILE 'BIOSIS'
         29750 AROMATIC
           820 SHIKIMATE
L135         2 L115 AND (AROMATIC OR SHIKIMATE)

FILE 'EMBASE'
         23540 AROMATIC
           192 SHIKIMATE
L136         2 L116 AND (AROMATIC OR SHIKIMATE)

FILE 'HCAPLUS'
        108138 AROMATIC
          1189 SHIKIMATE
L137         3 L117 AND (AROMATIC OR SHIKIMATE)

FILE 'NTIS'
         10267 AROMATIC
             8 SHIKIMATE
L138         0 L118 AND (AROMATIC OR SHIKIMATE)

FILE 'WPIDS'
        126387 AROMATIC
            23 SHIKIMATE
L139         1 L119 AND (AROMATIC OR SHIKIMATE)

TOTAL FOR ALL FILES
L140        14 L120 AND (AROMATIC OR SHIKIMATE)

=> s l20 and (phosphoenolpyruvate or (phospho enol or phosphoenol)(w)pyruvate
or pep)

FILE 'MEDLINE'
          4806 PHOSPHOENOLPYRUVATE
          1982 PHOSPHO
           461 ENOL
            47 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
           183 PHOSPHOENOL
         18255 PYRUVATE
           200 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          2045 PEP
L141         4 L11 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
```

```
                OL) (W) PYRUVATE OR PEP)

FILE 'SCISEARCH'
          3693 PHOSPHOENOLPYRUVATE
          1236 PHOSPHO
          4129 ENOL
            38 PHOSPHO ENOL
                 (PHOSPHO (W) ENOL)
           150 PHOSPHOENOL
         11650 PYRUVATE
           173 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE
          1379 PEP
L142         5 L12 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
                OL) (W) PYRUVATE OR PEP)

FILE 'LIFESCI'
          1429 PHOSPHOENOLPYRUVATE
           662 "PHOSPHO"
           171 "ENOL"
            13 PHOSPHO ENOL
                 ("PHOSPHO" (W) "ENOL")
            90 PHOSPHOENOL
          3941 PYRUVATE
            94 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE
           538 PEP
L143         4 L13 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
                OL) (W) PYRUVATE OR PEP)

FILE 'BIOTECHDS'
           234 PHOSPHOENOLPYRUVATE
           126 PHOSPHO
           104 ENOL
             2 PHOSPHO ENOL
                 (PHOSPHO (W) ENOL)
            30 PHOSPHOENOL
          1121 PYRUVATE
            30 (PHOSPHO ENOL OR PHOSPHOENOL) (W) PYRUVATE
           112 PEP
L144         3 L14 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
                OL) (W) PYRUVATE OR PEP)

FILE 'BIOSIS'
          5803 PHOSPHOENOLPYRUVATE
         54584 PHOSPHO
          1611 ENOL
           137 PHOSPHO ENOL
                 (PHOSPHO (W) ENOL)
```

```
          3552 PHOSPHOENOL
         28426 PYRUVATE
          3629 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          2775 PEP
L145        10 L15 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'EMBASE'
          3185 PHOSPHOENOLPYRUVATE
          1363 "PHOSPHO"
           982 "ENOL"
            37 PHOSPHO ENOL
                 ("PHOSPHO"(W)"ENOL")
           137 PHOSPHOENOL
         14873 PYRUVATE
           159 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          1865 PEP
L146         4 L16 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'HCAPLUS'
          8227 PHOSPHOENOLPYRUVATE
          5037 PHOSPHO
         12082 ENOL
            30 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
           430 PHOSPHOENOL
         32524 PYRUVATE
           402 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          3846 PEP
L147        10 L17 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'NTIS'
            35 PHOSPHOENOLPYRUVATE
            37 PHOSPHO
            72 ENOL
             0 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
             5 PHOSPHOENOL
           287 PYRUVATE
             3 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
          1067 PEP
L148         0 L18 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

FILE 'WPIDS'
```

```
            56 PHOSPHOENOLPYRUVATE
          2830 PHOSPHO
          1261 ENOL
            65 PHOSPHO ENOL
                 (PHOSPHO(W)ENOL)
            67 PHOSPHOENOL
           819 PYRUVATE
            72 (PHOSPHO ENOL OR PHOSPHOENOL)(W)PYRUVATE
           182 PEP
L149         2 L19 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W)PYRUVATE OR PEP)

TOTAL FOR ALL FILES
L150        42 L20 AND (PHOSPHOENOLPYRUVATE OR (PHOSPHO ENOL OR PHOSPHOEN
               OL)(W) PYRUVATE OR PEP)

=> s l20 and glucose

FILE 'MEDLINE'
        176697 GLUCOSE
L151        18 L11 AND GLUCOSE

FILE 'SCISEARCH'
         94684 GLUCOSE
L152        12 L12 AND GLUCOSE

FILE 'LIFESCI'
         27021 GLUCOSE
L153         7 L13 AND GLUCOSE

FILE 'BIOTECHDS'
         21329 GLUCOSE
L154        10 L14 AND GLUCOSE

FILE 'BIOSIS'
        186218 GLUCOSE
L155        22 L15 AND GLUCOSE

FILE 'EMBASE'
        140796 GLUCOSE
L156        21 L16 AND GLUCOSE

FILE 'HCAPLUS'
        210996 GLUCOSE
L157        16 L17 AND GLUCOSE

FILE 'NTIS'
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```
          2689 GLUCOSE
L158         0 L18 AND GLUCOSE

FILE 'WPIDS'
         17490 GLUCOSE
L159         2 L19 AND GLUCOSE

TOTAL FOR ALL FILES
L160       108 L20 AND GLUCOSE

=> s (l30 or l50 or l70 or l90 or l130 or l140 or l150 or l160) and py=<1995
range=1996,

FILE 'MEDLINE'
        194043 PY=<1995
L161         4 (L21 OR L41 OR L61 OR L81 OR L121 OR L131 OR L141 OR L151)
               AND PY=<1995

FILE 'SCISEARCH'
        111295 PY=<1995
L162         0 (L22 OR L42 OR L62 OR L82 OR L122 OR L132 OR L142 OR L152)
               AND PY=<1995

FILE 'LIFESCI'
         65559 PY=<1995
L163         5 (L23 OR L43 OR L63 OR L83 OR L123 OR L133 OR L143 OR L153)
               AND PY=<1995

FILE 'BIOTECHDS'
          4521 PY=<1995
                 (PY=<1995)
L164         3 (L24 OR L44 OR L64 OR L84 OR L124 OR L134 OR L144 OR L154)
               AND PY=<1995

FILE 'BIOSIS'
        156926 PY=<1995
L165         2 (L25 OR L45 OR L65 OR L85 OR L125 OR L135 OR L145 OR L155)
               AND PY=<1995

FILE 'EMBASE'
         38688 PY=<1995
L166         3 (L26 OR L46 OR L66 OR L86 OR L126 OR L136 OR L146 OR L156)
               AND PY=<1995

FILE 'HCAPLUS'
        178173 PY=<1995
L167         0 (L27 OR L47 OR L67 OR L87 OR L127 OR L137 OR L147 OR L157)
```

```
                AND PY=<1995

FILE 'NTIS'
         55706 PY=<1995
L168         0 (L28 OR L48 OR L68 OR L88 OR L128 OR L138 OR L148 OR L158)
                AND PY=<1995

FILE 'WPIDS'
        114525 PY=<1995
                 (PY=<1995)
L169         0 (L29 OR L49 OR L69 OR L89 OR L129 OR L139 OR L149 OR L159)
                AND PY=<1995

TOTAL FOR ALL FILES
L170        17 (L30 OR L50 OR L70 OR L90 OR L130 OR L140 OR L150 OR L160)
                AND PY=<1995

=> d 1-
d 1-

=> d 1-


L170 ANSWER 1 OF 17  MEDLINE
TI   Regulation of the lactose   ***phosphotransferase***   system of
     Streptococcus bovis by   ***glucose***   : independence of inducer
     exclusion and expulsion mechanisms.
SO   MICROBIOLOGY,   ***(1995 Sep)***   141 ( Pt 9) 2261-9.
     Journal code: BXW. ISSN: 1350-0872.
AU   Cook G M; Kearns D B; Russell J B; Reizer J; Saier M H Jr
AN   96118707     MEDLINE

L170 ANSWER 2 OF 17  MEDLINE
TI   Triiodothyronine treatment increases substrate cycling between
     pyruvate carboxylase and malic enzyme in perfused rat liver.
SO   METABOLISM: CLINICAL AND EXPERIMENTAL,   ***(1995 Nov)***   44 (11)
     1380-3.
     Journal code: MUM. ISSN: 0026-0495.
AU   Petersen K F; Blair J B; Shulman G I
AN   96067411     MEDLINE

L170 ANSWER 3 OF 17  MEDLINE
TI     ***Glucose***   kinase-dependent catabolite repression in
     Staphylococcus xylosus.
SO   JOURNAL OF BACTERIOLOGY,   ***(1995 Nov)***   177 (21) 6144-52.
     Journal code: HH3. ISSN: 0021-9193.
AU   Wagner E; Marcandier S; Egeter O; Deutscher J; Gotz F; Bruckner R
```

AN 96042090 MEDLINE

L170 ANSWER 4 OF 17 MEDLINE
TI Regulation of sugar ***transport*** via the multiple sugar metabolism operon of Streptococcus ***mutans*** by the ***phosphoenolpyruvate*** ***phosphotransferase*** system.
SO JOURNAL OF BACTERIOLOGY, ***(1995 Oct)*** 177 (19) 5704-6. Journal code: HH3. ISSN: 0021-9193.
AU Cvitkovitch D G; Boyd D A; Hamilton I R
AN 96032411 MEDLINE

L170 ANSWER 5 OF 17 LIFESCI COPYRIGHT 1997 CSA
TI The influence of ozone and nutrition on delta super(13)C in Betula pendula
SO OECOLOGIA, (***1995***) vol. 103, no. 4, pp. 397-406. ISSN: 0029-8549.
AU Saurer, M.; Maurer, S.; Matyssek, R.*; Landolt, W.; Guenthardt-Goerg, M.S.; Siegenthaler, U.
AN 97:18770 LIFESCI

L170 ANSWER 6 OF 17 LIFESCI COPYRIGHT 1997 CSA
TI Inorganic phosphate (Pi) enhancement of dark respiration in the Pi-limited green alga Selenastrum minutum. Interactions between H super(+)/Pi cotransport, the plasmalemma H super(+)-ATPase, and dark respiratory carbon flow
SO PLANT PHYSIOL., (***1994***) vol. 104, no. 2, pp. 624-637. ISSN: 0032-0889.
AU Gauthier, D.A.; Turpin, D.H.*
AN 97:7446 LIFESCI

L170 ANSWER 7 OF 17 LIFESCI COPYRIGHT 1997 CSA
TI How neutral red ***modified*** ***carbon*** and electron ***flow*** in Clostridium acetobutylicum grown in chemostat culture at neutral pH
SO FEMS MICROBIOL. REV., (***1995***) vol. 16, no. 2-3, pp. 151-162. ISSN: 0168-6445.
AU Girbal, L.; Vasconcelos, I.; Saint-Amans, S.; Soucaille, P.*
AN 96:108681 LIFESCI

L170 ANSWER 8 OF 17 LIFESCI COPYRIGHT 1997 CSA
TI Use of feedback-resistant threonine dehydratases of Corynebacterium glutamicum to ***increase*** ***carbon*** ***flux*** towards L-isoleucine
SO APPL. ENVIRON. MICROBIOL., (***1995***) vol. 61, no. 12, pp. 4315-4320. ISSN: 0099-2240.

AU Morbach, S.; Sahm, H.; Eggeling, L.*
AN 96:41140 LIFESCI

L170 ANSWER 9 OF 17 LIFESCI COPYRIGHT 1997 CSA
TI ***Glucose*** kinase-dependent catabolite repression in Staphylococcus xylosus
SO J. BACTERIOL., (***1995***) vol. 177, no. 21, pp. 6144-6152. ISSN: 0021-9193.
AU Wagner, E.; Marcandier, S.; Egeter, O.; Deutscher, J.; Goetz, F.; Brueckner, R.*
AN 96:13411 LIFESCI

L170 ANSWER 10 OF 17 BIOTECHDS COPYRIGHT 1997 DERWENT INFORMATION LTD
TI How neutral red ***modified*** ***carbon*** and electron ***flow*** in Clostridium acetobutylicum grown in chemostat culture at neutral pH;
NADH production; a review (conference paper)
SO FEMS Microbiol.Rev.; (***1995***) 16, 2-3, 151-62
CODEN: FMREE4 ISSN: 0168-6445
Beyond 2000-Chemicals from Biotechnology-Ecological Challenge and Economic Constraints, Hannover, Germany, 18-20 October, 1993.
AU Girbal L; Vasconcelos I; Saint-Adams S; *Soucaille P
AN 96-01938 BIOTECHDS

L170 ANSWER 11 OF 17 BIOTECHDS COPYRIGHT 1997 DERWENT INFORMATION LTD
TI Deviation of ***carbon*** ***flux*** from ethanol towards ***alternative*** electron acceptors in engineered Saccharomyces cerevisiae yeast strains;
metabolic engineering; Lactobacillus casei lactate-dehydrogenase and glycerol-dehydrogenase overexpression (conference abstract)
SO Yeast; (***1995***) 11, Spec.Iss., S537
CODEN: YESTE3 ISSN: 0749-503X
17th International Conference on Yeast Genetics and Molecular Biology, Lisbon, Portugal, 10-16 June, 1995.
AU Dequin S; Michnick S; Roustan J L; Barre P
AN 96-01731 BIOTECHDS

L170 ANSWER 12 OF 17 BIOTECHDS COPYRIGHT 1997 DERWENT INFORMATION LTD
TI Use of feedback-resistant threonine-dehydratases of Corynebacterium glutamicum to ***increase*** ***carbon*** ***flux*** towards L-isoleucine;
metabolic flux through the homoserine-dehydrogenase reaction; metabolic engineering and effect of plasmid copy number
SO Appl.Environ.Microbiol.; (***1995***) 61, 12, 4315-20
CODEN: AEMIDF ISSN: 0099-2240
AU Morbach S; Sahm H; *Eggeling L
AN 96-00356 BIOTECHDS

L170 ANSWER 13 OF 17 BIOSIS COPYRIGHT 1997 BIOSIS
TI Influence of nitrogen nutrition on chloroplast structure, RuBisCo and PEP-case from corn.
SO Boletim da Sociedade Broteriana 66 (2). 1993-1994. 323-342. ISSN: 0081-0657
AU Santos A; Santos I; Almeida J M; Salema R
AN 96:194016 BIOSIS

L170 ANSWER 14 OF 17 BIOSIS COPYRIGHT 1997 BIOSIS
TI Use of feedback-resistant threonine dehydratases of Corynebacterium glutamicum to ***increase*** ***carbon*** ***flux*** towards L-isoleucine.
SO Applied and Environmental Microbiology 61 (12). 1995. 4315-4320. ISSN: 0099-2240
AU Morbach S; Sahm H; Eggeling L
AN 96:34666 BIOSIS

L170 ANSWER 15 OF 17 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.
TI Triiodothyronine treatment increases substrate cycling between pyruvate carboxylase and malic enzyme in perfused rat liver.
SO Metabolism: Clinical and Experimental, (***1995***) 44/11 (1380-1383).
ISSN: 0026-0495 CODEN: METAAJ
AU Petersen K.F.; Blair J.B.; Shulman G.I.
AN 96087228 EMBASE

L170 ANSWER 16 OF 17 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.
TI Regulation of sugar ***transport*** via the multiple sugar metabolism operon of Streptococcus ***mutans*** by the ***phosphoenolpyruvate*** ***phosphotransferase*** system.
SO Journal of Bacteriology, (***1995***) 177/19 (5704-5706).
ISSN: 0021-9193 CODEN: JOBAAY
AU Cvitkovitch D.G.; Boyd D.A.; Hamilton I.R.
AN 96032768 EMBASE

L170 ANSWER 17 OF 17 EMBASE COPYRIGHT 1997 ELSEVIER SCI. B.V.
TI Alteration of the biochemical valves in the central metabolism of escherichia coli.
SO Annals of the New York Academy of Sciences, (***1994***) 745 (21-34).
ISSN: 0077-8923 CODEN: ANYAA
AU Liao J.C.; Chao Y.-P.; Patnaik R.
AN 96009351 EMBASE

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